

Amendments To The Specification

Please replace paragraph [0035] with the following amended paragraph:

[0035] The overall assembly and operation of an electrolyte stack is illustrated by the schematic isometric view of Fig. 1. The stack is formed by a series of alternating electrolyte plates 5 with appropriate anodes and cathodes (not shown), interconnects 7 and insulating support material 9, with negative end plate 11 and positive end plate 13. Positive and negative electrical connections 15 and 17 provide direct current to the stack, which operates at about 50 to 700 mV per cell.

Please replace paragraph [0038] with the following amended paragraph:

[0038] Another preferred embodiment of the solid-state device of the invention is illustrated in Fig. 2, based on the disclosure of US-A-5,570,279 relating to flat plate designs of oxygen pumps in general. As shown in Fig. 2 this device 210 includes a plurality of electrochemical cells 212, 214 joined together by an electrically conducting interconnect 216 of the invention. A similar interconnect would likewise be used to join the cells shown to following cells or to form the terminus of the device via an end cap 230 [[(not shown)]].

Please replace paragraph [0043] with the following amended paragraph:

[0043] Gas passages 200, 202, 222 and 224 may be fabricated within the interconnect in a wide variety of shapes, in cross-section, such as rectangular, trapezoidal, semi-circular and the like. The depth and spacing of the passages may be widely varied and optimum designs may be assessed for a given application without undue experimentation. For example, the depth of a passage may decrease with distance traversed across the surface of the electrode

layer in order to increase the diffusional flux to the electrode surface of the component gas being transported through the electrolyte.